A NEW SPECIES OF *NEOFUNGELLA* (BRYOZOA, STENOLAEMATA) FROM SOUTHERN CALIFORNIA

William C. Banta

Allan Hancock Foundation
University of Southern California
Los Angeles, California 90007

In his monograph on the Heteroporidae, Borg (1933:259) erected a new genus, *Neofungella*, to accommodate the peculiar antarctic species, *Heteropora claviformis* Waters, 1904. Borg comments (p. 260) that the characters of the species ally it more closely to the fossil genera *Multicresis* d'Orbigny, 1852:1073, and *Fungella* von Hagenow, 1851:37, than to the recent genus *Heteropora* Blainville, 1830. The discovery of a new member of the genus *Neofungella* from southern California is of interest in view of the scattered distributions of the fossil genera.

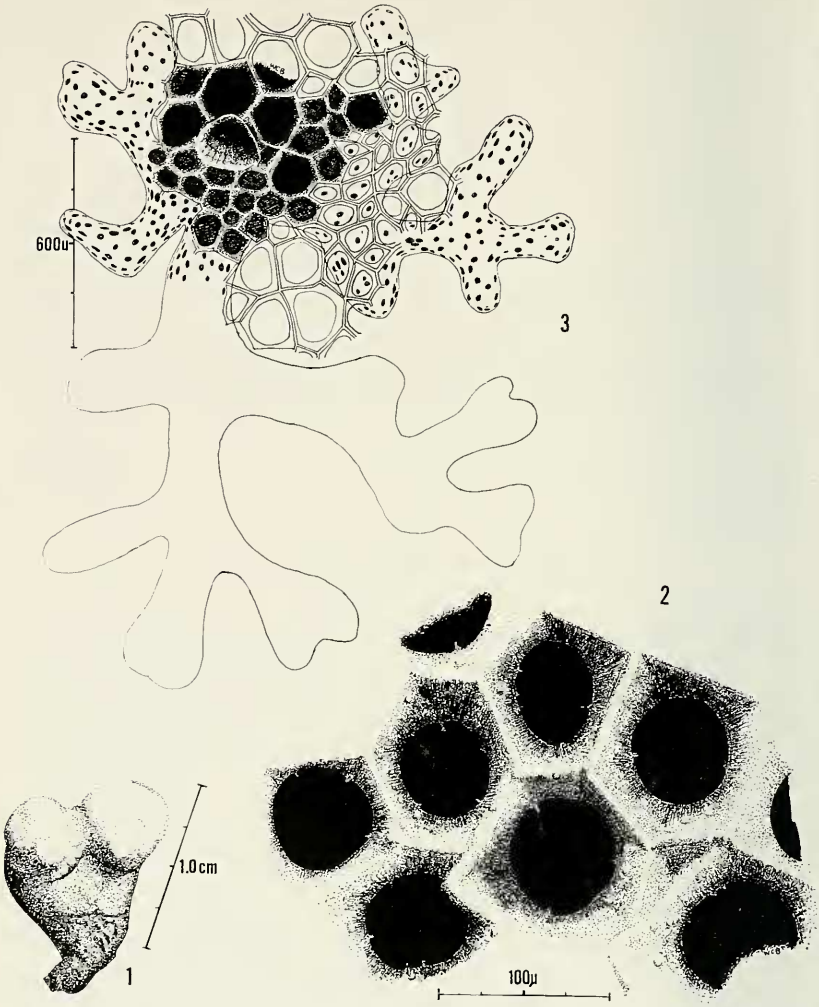
Neofungella californica, new species
Figures 1 to 3

Holotype: Deposited at the Allan Hancock Foundation, University of Southern California, Los Angeles; AHF number 662, collected 26 March, 1966, from Bird Rock, Santa Catalina Island, Los Angeles County, California, at a depth of 30 meters by Mr. Ronald McPeak.

Paratype: Abundant material deposited at the Allan Hancock Foundation, the United States National Museum, and the British Museum (Natural History).

Description: The colonies are pure white, biscuit-shaped or mushroom-shaped, and measure from one to 2 centimeters in diameter. Figure 1 shows a capitate colony rising from a constricted base, though most of the specimens are somewhat smaller, more nearly hemispherical, and directly encrust the substrate. The colonies, when examined in thin section, are clearly multilaminar, each successive layer spreading wider than the preceding one.

The gymnocyst of the autozoecia is irregularly hexagonal, 0.10 to 0.12 mm in diameter, and may bear pronounced apertural processes, especially in the younger regions of the zoarium (Fig. 2). Kenozoecia, which are slightly less abundant than the autozoecia, are scattered irregularly over the surface of the colony; in thin longitudinal



Figures 1 to 3. Neofungella californica, new species. *Fig. 1*, zoarium. *Fig. 2*, apertures, showing decoration of the gymnocyst. *Fig. 3*, oecium of the holotype specimen. The area around the oeciostome has been shaded to show the sculpturing of the cancelli and oeciostome; the area to the right of the shaded region shows the outlines of the cancelli; the punctations of the oecium are shown on the right and left; the remainder of the oecium is shown in outline.

(vertical) section, the kenozoecia can be seen to represent the proximal ends of developing autozoecia (see Borg, 1933:266). The gymnocyst is granular, even in the youngest zoecia, and may be developed into tiny spinules which project into the aperture (Fig. 2).

The remarkable oecium branches dichotomously, ramifying between the zoecia. As in *Neofungella claviformis*, the exposed surface is covered with a delicate framework of cancelli closely adherent to the minutely punctate oecium (Fig. 3).

The oeciostome is thin, delicate, widely flaring, and measures 0.17 mm. wide by 0.155 mm long; it is delicately striated longitudinally and radially (Fig. 3).

Remarks: *Neofungella californica* agrees well with the generic description given by Borg (1933:259). Though it is primarily encrusting and convex, it occasionally becomes capitate. The autozoecia are at least as abundant as the kenozoecia, and open on both the peduncle and capitum. The structure of the oecium agrees closely with the description given by Borg (1933:267-271). It differs, however from the only previously-described member of the genus, *Neofungella claviformis* (Waters) in the following three characters: (1) the oecium branches dichotomously in *N. californica*, but not in *N. claviformis*; (2) the oeciostome is erect, flared, and prominent in *N. californica*, but shorter in *N. claviformis* (see Borg, 1933, plate II, fig. 2); (3) the diameter of the apertures of *N. californicus* is only half that of *N. claviformis*, (0.19 mm to 0.22 mm). The above comparisons were drawn from specimens of *N. claviformis* from the collections of the New Zealand Oceanographic Institute (Wellington), *Endeavour* station number A527 (Ross Sea, Antarctic, 500 fathoms). The collections were placed at my disposal through the kindness of Mr. John S. Bullivant of the Allan Hancock Foundation.

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